# JCAT IED Intel



- There are two types of Cordless Phones currently in use as RCIEDs in theatre.
- The first is based on a GSM mobile type handset. This handset is unable to use standard mobile networks to communicate; instead it works through a base station plugged into a normal phone network.





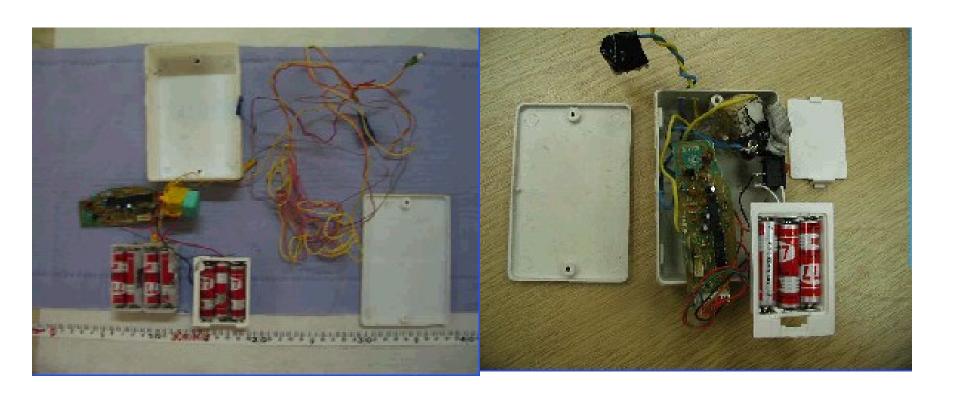
 The second type of phone is the type used around a home. This has a more conventional phone-handset that can be fitted to a cradle on the base station. See figures 3 and 4. This type of system does not have the same range as the GSM system but can still be used for up to 200m to initiate a device.





 Wireless door bell chime units are one of the easiest components the terrorist can buy to make an RCIED with. These systems are extremely cheap compared with other wireless equipment and does not arouse suspicion unless purchased in very large numbers.

- Door bell units are manufactured by a large amount of companies and are sold worldwide for legitimate use. The power is supplied by a number of 1.5v batteries and output is taken from the door bell chime speaker
- The terrorist tends to place the components in plain white boxes so that they are hard to identify.



 The transmitter for this device is small and easy to conceal. This makes it ideal for the terrorist as it does not draw unwanted attention while trying to detonate the device. All transmitters for this are of a small button type and may have added modifications to give greater transmission range.



 One of the first types of system to be used in RCIEDs was servo controlled toys. These include things such as remote controlled cars, boats and planes. Prices range from relatively cheap to quite expensive and advanced models.

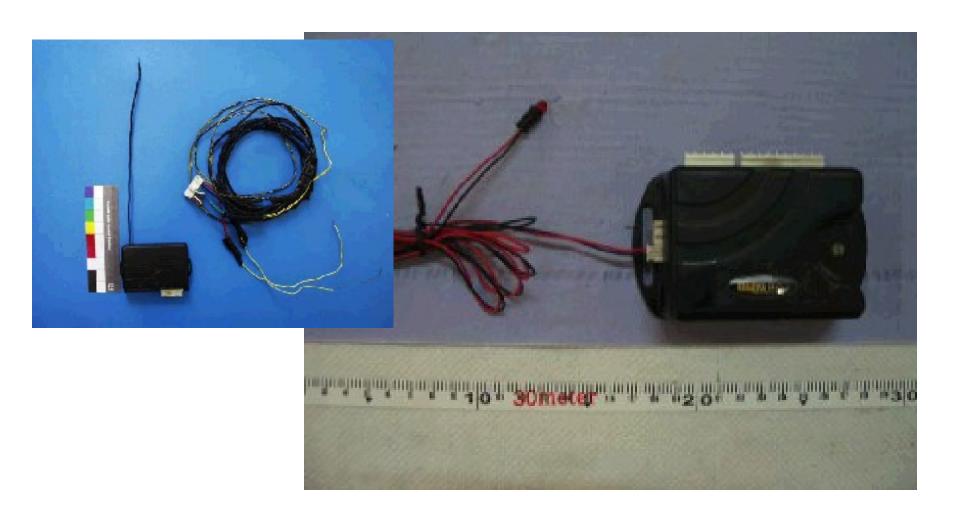


• The terrorist will normally take the toys apart and place the receiver board in a separate container. There are a number of transmitters for these types of devices. They range from two handed paddle controls to single handed trigger and wheel design. These are slightly harder for the terrorist to conceal and explain away if they do not possess the toy. All transmitters have a telescopic antenna and will transmit over a range of 200m



 One of the most prolific RCIED systems in use today is the Car Alarm system. These are normally fitted into vehicles to provide central locking and alarm protection as an aftermarket extra. They are very easy to modify for use as a trigger for an explosive device. The power is supplied by a 12v battery and output can be taken from a number of manufactured terminals

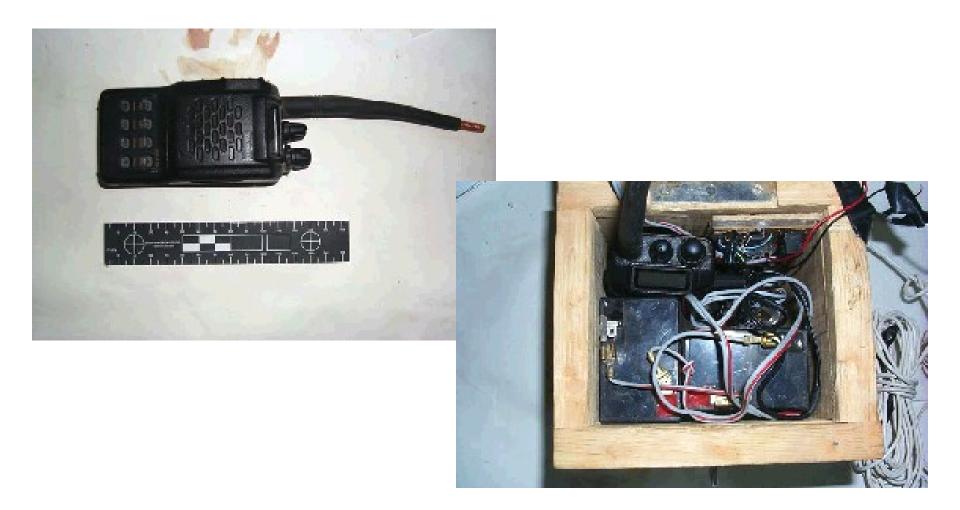
• All the receiver units recovered from scene are of the type shown, consisting of a black box, 1 or 2 white output terminals, a battery source and various connecting wires. The transmitter for this device is small and easy to conceal



 This makes it ideal for the terrorist as it does not draw unwanted attention while trying to detonate the device. All transmitters for this are of a key fob type. Some may have telescopic antennae and be attached to a key ring.



 Two way radios provide the terrorist with a high degree of flexibility and reliability. This has to be compromised with the higher cost and technological knowledge needed to modify them. These radios give the terrorist a large choice of frequencies to use and a range of up to 5km



 Most modern equipment comes with an integral coding system that needs to be configured for optimum use. To date the terrorist has used their own "home made" decoder boards. The power is supplied by batteries of various types and output taken from the headphone socket. The audio output is then fed into a tone decoder board which will initiate the device when the correct tones are received.



 Two way radios come in a number of designs and have different frequency capabilities. All are capable of transmitting and receiving and have a screw on, rubber antenna. Most of the cheaper models are sold in pairs.

 Many of the IEDs seen in theater so far have consisted of military type ordnance. This can range from 60mm mortar rounds up to 155mm artillery shells. This type of main charge is ideal for the terrorist as it is designed to cause maximum damage.



 The charge is fairly stable and needs minimum modification to enable it to function as a command device. There are a large amount of munitions readily available within theatre and, while this is the case, it is likely that the terrorist will continue to favor projectiles as a main charge.

 A high percentage of devices have been found along MSR's and have been camouflaged. This ranges from covering the device in garbage and rubble; to encasing the charge in concrete to look like a curb stone.





